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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,390	07/29/2005	Yong-Hoon Chung	5252MC-1	7628
22442	7590	08/14/2007	EXAMINER	
SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202			WOODWARD, CHERIE MICHELLE	
			ART UNIT	PAPER NUMBER
			1647	
			MAIL DATE                    DELIVERY MODE	
			08/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10519390	7/29/2005	CHUNG ET AL.	5252MC-1

## EXAMINER

Cherie M.. Woodward

ART UNIT	PAPER
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1647                    20070806

## DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

## Commissioner for Patents

The reply filed on 28 May 2007 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): Applicant did not respond to the rejections under 35 USC 112, first paragraph, written description, nor to the rejections under 35 USC 112, second paragraph. Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991), makes clear that the written description provision of 35 U.S.C. 112 is severable from its enablement provision (see p. 1115) (see also, University of Rochester v. G.D. Searle & Co., 358 F.3d 916, 69 USPQ2d 1886, 1891 (Fed. Cir. 2004)).

**Since the above-mentioned reply appears to be bona fide, applicant is given ONE (1) MONTH or THIRTY (30) DAYS from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cherie M. Woodward whose telephone number is (571) 272-3329. The examiner can normally be reached on Monday - Thursday 9:00am-7:30pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath N. Rao can be reached at (571) 272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*M. manjunath*  
MANJUNATH N. RAO, PH.D.  
Supervisory PRIMARY EXAMINER  
A.V. 1b47

*Chase Woodward*  
8/6/2007  
**NOT ENTERED**

Appl. No. 10/519,390  
Amdt. dated May 28, 2007  
Reply to Office Action mailed November 28, 2006

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-37 (cancelled)

38. (Currently amended) A protein variant which substitutes a valine residue for a phenylalanine residue in a protein having a biological response-modifying function by binding domain of a cytokine to a receptor.

39. (Cancelled)

40. (Currently amended) The protein variant according to claim 38 39, wherein the cytokine is a 4-alpha helix bundle cytokine.

41. (Previously presented) The protein variant according to claim 40, wherein the 4-alpha helix bundle cytokine is selected from the group consisting of CNTF, EPO, F1t3L, G-CSF, GM-CSF, GH, IL-2, IL-3, IL-4, 1L-5, IL-6, IL-12p35, LPT, LIF, M-CSF, OSM, PL, SCF, TPO, IFN- $\alpha$ 2A, IFN- $\alpha$ 2B, IFN- $\beta$  IFN- $\gamma$ , IFN- $\omega$  and IFN- $\tau$ .

42. (Previously presented) The protein variant according to claim 41, wherein the CNTF, EPO, F1t3L, G-CSF, GM-CSF, GH, IL-2, IL-3, IL4., 1L-5, M-6, IL-12p35, LPT, L1F, M-CSF, OSM, PL, SCF and TPO are altered by substituting valine for phenylalanine residue of amino acid residues between positions 110 and 180.

43-61 (Cancelled)

62. (Currently amended) The protein variant according to claim 41, wherein the 4-alpha helix bundle cytokine is TPO that is altered by substituting a valine residue for a phenylalanine residue at a position 46, 128, 131, 141, 186, 204, 240 or 286 of an amino acid sequence designated as SEQ ID NO.: 25.

63-74 (Cancelled)

75. (New) A pharmaceutical composition comprising the protein variant according to any one of Claims 38, 40, 41, 42 and 62 and a pharmaceutically acceptable carrier.